

MAY 02 2006

Attorney's Docket No.: 15670-054US1 / SD2002-186

**OFFICIAL COMMUNICATION FACSIMILE:**

**OFFICIAL FAX NO: (571) 273-8300**

Number of pages including this page 7

Applicant : Gregory C. Roberts, et al.  
Serial No. : 10/528,348  
Filed : November 7, 2005

Art Unit : 2877  
Examiner : Unknown

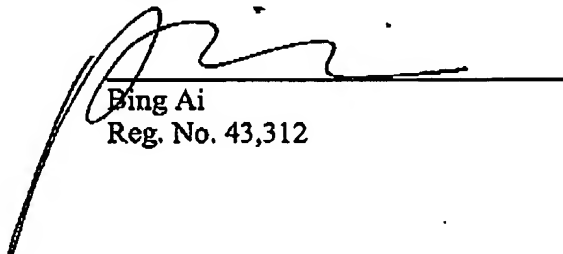
Title : STREAM-WISE THERMAL GRADIENT CLOUD CONDENSATION NUCLEI  
CHAMBER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attached to this facsimile communication cover sheet is a Request for Corrected Official Filing Receipt and supporting documentation, faxed this 2<sup>nd</sup> day of May, 2006, to the United States Patent and Trademark Office.

Respectfully submitted,

Date: May 2, 2006

  
Bing Ai  
Reg. No. 43,312

Fish & Richardson P.C.  
PTO Customer No. 20985  
12390 El Camino Real  
San Diego, California 92130  
Telephone: (858) 678-5070  
Fax: (858) 678-5099  
10626752.doc

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Attorney's Docket No.: 15670-054US1 / SD2002-186

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
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Applicant : Gregory C. Roberts, et al.

Art Unit : 2877

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Serial No. : 10/528,348

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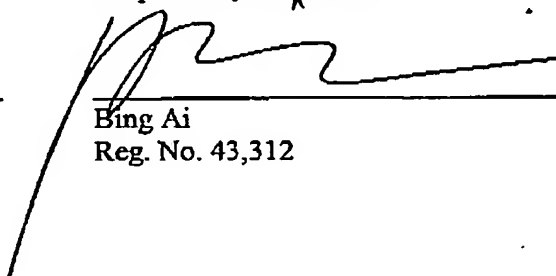
Title : STREAM-WISE THERMAL GRADIENT CLOUD CONDENSATION NUCLEI  
CHAMBERCommissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT

Please correct the Filing Receipt for the above-referenced application to include the second inventor Athanasios Nenes, Mableton, Georgia, as set forth in the attached Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Submission Under 35 U.S.C. 371 as filed with the U.S. Patent and Trademark Office on March 17, 2005.

Please supply a corrected Filing Receipt to the undersigned with respect to this application. A copy of the original Filing Receipt showing the desired changes in red ink is attached for your convenience.

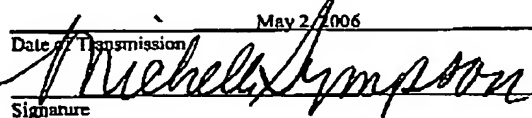
No fee is believed to be due. If, however, there are any charges or credits, please apply them to Deposit Account No. 06-1050.

Respectfully submitted,

Date: May 2, 2006Fish & Richardson P.C.  
12390 El Camino Real  
San Diego, California 92130  
Telephone: (858) 678-5070  
Facsimile: (858) 678-5099  
10626746.doc  
Bing Ai  
Reg. No. 43,312

## CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

Date of Transmission May 2, 2006  
  
SignatureMichelle Simpson  
Typed or Printed Name of Person Signing Certificate

MAY 02 2006

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 15670-01 1 SD2002-186
		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)
INTERNATIONAL APPLICATION NO. PCT/US03/29213	INTERNATIONAL FILING DATE 18 September 2003	PRIORITY DATE CLAIMED 18 September 2002
TITLE OF INVENTION STREAM-WISE THERMAL GRADIENT CLOUD CONDENSATION NUCLEI CHAMBER		
APPLICANT(S) FOR DO/EO/US Gregory C. Roberts and Athanasios Nenes		

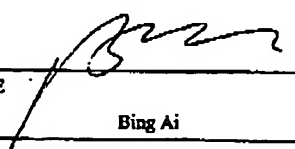
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
- ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
- ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
- ☒ The US has been elected (Article 31).
- ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - ☒ is attached hereto (required only if not communicated by the International Bureau).
  - ☐ has been communicated by the International Bureau.
  - ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
- ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - ☐ is attached hereto.
  - ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
- ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - ☐ are attached hereto (required only if not communicated by the International Bureau).
  - ☐ have been communicated by the International Bureau.
  - ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - ☒ have not been made and will not be made.
- ☐ An English language translation of amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
- ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
- ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

- ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.
- ☐ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
- ☒ A preliminary amendment.
- ☐ An Application Data Sheet under 37 C.F.R. 1.76.
- ☐ A substitute specification.
- ☐ A power of attorney and/or change of address letter.
- ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 C.F.R. 1.821 - 1.825.
- ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
- ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
- ☒ Other items or information:  
Return Receipt Postcard, Express Mail Declaration

CERTIFICATE OF MAILING BY EXPRESS MAIL  
Express Mail Label No. EV399314765US  
Date of Deposit March 17, 2005

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5)		INTERNATIONAL APPLICATION NO. PCT/US03/29213		ATTORNEY'S DOCKET NUMBER 15670-054US1	
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee.....\$300				\$300.00	
22. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4).....\$100 All other situations.....\$200				\$200.00	
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100 International Search Report prepared and provided to the Office.....\$400 All other situations.....\$500				\$100.00	
Total of 21, 22 and 23 =				\$600.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
-100 =	/50 =		X \$250	\$0.00	
Surcharge of \$130 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 C.F.R. 1.492(h)).				\$0.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	27 - 20 =	7	x \$50	\$350.00	
Independent Claims	5 - 3 =	2	x \$200	\$400.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$1,350.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 C.F.R. 1.27. Fees above are reduced by 1/2.				\$675.00	
SUBTOTAL =				\$675.00	
Processing fee of \$130 for furnishing the English Translation later than 30 months from the earliest claimed priority date (37 C.F.R. 1.492(i))				\$0.00	
TOTAL NATIONAL FEE =				\$675.00	
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property				\$0.00	
TOTAL FEES ENCLOSED =				\$675.00	
				Amount to be refunded:	\$0.00
				Amount to be charged:	\$0.00
<p>a. <input checked="" type="checkbox"/> A check in the amount of \$675.00 to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. 06-1050 in the amount of \$0.00 to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1050. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p>NOTE: Where an appropriate time limit under 37 C.F.R. 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</p> <p>SEND ALL CORRESPONDENCE TO:</p>					
PTO Customer No:		20985			
SIGNATURE					
NAME		Bing Ai			
REGISTRATION NUMBER		43,312			

10483823.doc

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MAY 02 2006

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/528,348	11/07/2005	2877	740	15670-054US1 SD2002-186	6	27	5

CONFIRMATION NO. 5044

20985  
FISH & RICHARDSON, PC  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

FILING RECEIPT

  
\*OC000000018107488\*

Date Mailed: 02/23/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Gregory C. Roberts, San Diego, CA;

*Athanasios Nenes, Mableton, Georgia*Power of Attorney: The patent practitioners associated with Customer Number 20985.

## Domestic Priority data as claimed by applicant:

This application is a 371 of PCT/US03/29213 09/18/2003  
which claims benefit of 60/411,688 09/18/2002

## Foreign Applications

Projected Publication Date: 05/01/2006

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

## Title

Stream-wise thermal gradient cloud condensation nuclei chamber

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**Preliminary Class**

356

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

**LICENSE FOR FOREIGN FILING UNDER****Title 35, United States Code, Section 184****Title 37, Code of Federal Regulations, 5.11 & 5.15****GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject

matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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